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TITLE: PRODUCTION METHOD FOR POLISHING
COMPOSITION

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INVENTOR-INFORMATION:

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ABSTRACT:

PROBLEM TO BE SOLVED: To provide a method for producing a polishing composition excellent in dispersion stability and containing agglomerate particles in a small amount.

SOLUTION: In step 1-1, the pH of ultrapure water is adjusted to 1.0-2.7; then, a fumed silica powder with a specific surface area of 50-200 m²/g is charged into the ultrapure water until the initial silica concentration reaches 46-54 wt.%, while shearing force is being applied by a high-shear dispersion apparatus; and shearing force is applied for 1-5 hr by the high-shear dispersion apparatus. In step 1-2, a small amount of ultrapure water is added to the resultant silica dispersion to give it silica concentration of 45-53 wt.% and shearing force is applied for 10-40 min. In step 1-3, ultrapure water is added to the silica dispersion to give it silica concentration of 33-44 wt.% and shearing force is applied for 0.5-4 hr. In step 2-1, the silica dispersion is added to an aqueous basic substance solution which is prepared

so that when
mixed with the silica dispersion, it gives a polishing composition
with a pH of
8-12 and silica concentration of 10-30 wt.%.

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